FILE NOTATIONS

Entered in NID File .....
Location Map Pinned .....
Card Indexed .....

Checked by Chief .....
Approval Letter .....
Disapproval Letter .....

COMPLETION DATA:

Date Well Completed 5-14-78

Location Inspected .....

Bond released
State or Fee Land .....

OW..... WW..... TA.....
GW..... OS..... PA.....

LOGS FILED

Driller's Log.....
Electric Logs (No.) .....

E..... I..... Dual I Lat..... GR-N..... Micro.....
BHC Sonic GR..... Lat..... Mi-L..... Sonic.....
CBLog..... CCLog..... Others.....

LeCLAIR-WESTWOOD, INC.
388 DENVER CLUB BUILDING
DENVER, COLORADO 80202
(303) 825-4258

October 19, 1977

Bureau of Indian Affairs
U. S. Department of Interior
Navajo Area Office
Window Rock, Arizona 86515

Attention: Mr. Thomas Lynch

RE: Federal No. N00-C-14-20-5298
Sanchez-O'Brien
LeClair-Westwood, Inc., Agent
Navajo #3
NE NW Section 11, T40S, R25E
San Juan County, Utah

Gentlemen:

In compliance with rule A. Preliminary Environmental Review of Part II (Drilling Operations) of your Approval of Operations procedure, please find enclosed a topographic map of the subject area with the proposed location stipulated.

We ask your early consideration and approval of this site.

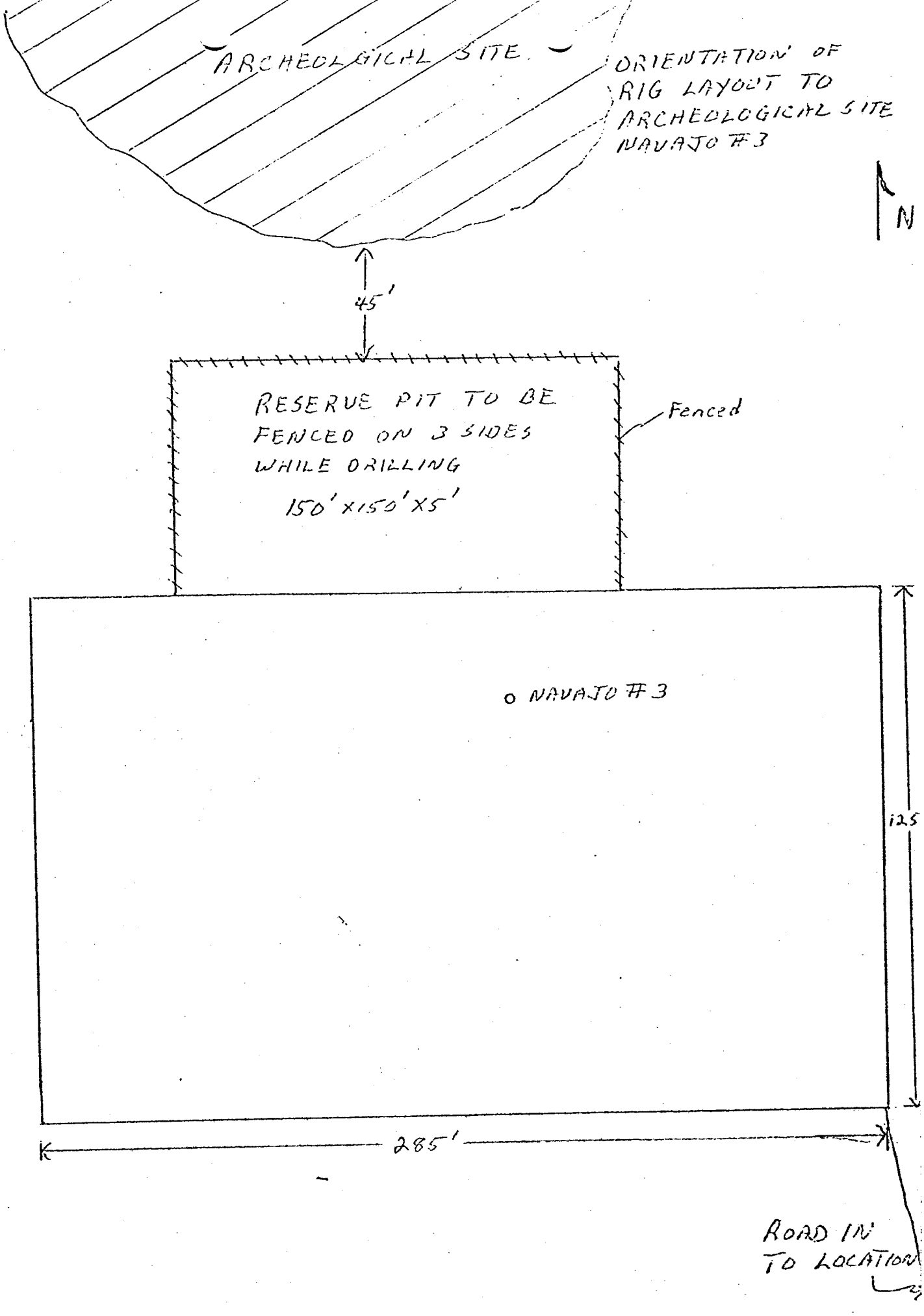
Yours very truly,

LeCLAIR-WESTWOOD, INC.

W. H. Leach, Jr.
President

WHL:blw

CC: U. S. Geological Survey
William G. Hara
Robert Gutierrez
Brian O'Brien


ARCHEOLOGICAL SITE
ORIENTATION OF RIG LAYOUT TO ARCHEOLOGICAL SITE NAVAJO #3
N
45'
RESERVE PIT TO BE FENCED ON 3 SIDES WHILE DRILLING
150' x 150' x 5'
Fenced
o NAVAJO #3
125
285'
ROAD IN TO LOCATION

NOT TO SCALE

APPLICATION FOR APPROVAL OF OPERATIONS

(NTL-6)

SANCHEZ-O'BRIEN PETROLEUM GROUP
LeCLAIR-WESTWOOD, INC., AGENT

NAVAJO #3

NE NW SECTION 11, T40S, R25E
SAN JUAN COUNTY, UTAH

I. General Statement of Environmental Impact

We propose to drill the subject well to a depth of 6300' to test the Desert Creek Formation. In this undertaking, it will be necessary to move in a rotary drilling rig to drill the well, and a completion unit, at a later date (assuming production is discovered) to complete this well. In the latter regard, 5-1/2" O.D. casing will be utilized. As a final measure, it will be necessary to build production facilities.

Roads will be built only as necessary to assure access to temporary and permanent facilities. The map(s) attached show the location of these facilities and the required roads. In the case of all roads and excavations made for production facilities, all of these will be restored to their original conditions, when no longer required.

In no case will the drainage pattern of the land be changed or diverted.

Likewise, in no case, save and except leveling the drill site and tank battery site, will the topography or terrain be changed or altered in any way. No permanent facilities other than a tank battery are contemplated for construction.

II. Drilling Operations

A. Preliminary Enviromental Review

Our letter, dated October 19, 1977, was sent to District Engineer in Farmington, New Mexico and Bureau of Indian Affairs in Window Rock, Arizona. To date no rebuttal or refusal has been received (copy of letter attached).

B. Application for Permit to Drill

(1) See surveyors plat, attached.

(2) See surveyors plat, attached.

(3) Morrison Formation

(4) See rig inventory, attached.

(5) 6300'

(6) See geological prognosis, attached.

(7) See geological prognosis, attached.

(8) See Form 9-331C, attached.

(9) See Form 9-331C, attached.

(10) See rig diagram of blow out preventer equipment, attached. The pressure control equipment will be a 10" Shaffer LWS 3000 psi working pressure Hydraulic type blow out preventer. Daily check of blow out preventer equipment will be made and reports made of same to USGS by drilling contractor.

(11) a. See rig inventory and diagram for circulating system specifications.

b. See geological prognosis, attached.

(12) See geological prognosis, attached. Operator, however reserves the right to drill stem test any and all hydrocarbon shows encountered.

(13) No abnormal pressures or temperatures or unusual conditions expected. This general area has sufficient history to make a reasonably accurate prognosis. Hazards of a gaseous nature can be handled by the equipment spelled out in (10) above.

(14) This project can start upon approval and should require approximately 45 days duration.

(15) No additional comments.

III. Multi-point Surface Use and Operations Plan

As a general policy, it is the intention of the operator and his representative to utilize as little surface land as possible and to re-grade, restore and/or replace all damages, or any land used that has served its purpose. In no way will water right-of-ways, or drainage areas be affected, and in no way will fresh water be disturbed or polluted.

A-1 Existing Roads - See maps attached. Existing roads are to be improved as required for the movement of our equipment. We will also maintain existing roads as required and as dictated by any deterioration we may cause.

A-2 Planned Access Roads - No new roads are planned but approximately the last 1/4 mile (north), which is an existing trail, from the main road to the location (as shown in blue on the map). The other access roads (existing) are shown. No new cuts, fills or culverts will be required. There are no fences to be cut or cattleguards to be set. No surfacing materials will be needed to be hauled to this location as the last 1/4 mile of road will need to be graded only.

A-3 Location of Existing Wells - See map, attached.

A-4 Location of Tank Batteries, Production Facilities and Production Gathering and Servicing Lines - A. Tank battery and heater treater are located on the drill site location. There are two 400 barrel tanks and a 6' x 20' heater treater. All flow lines are buried.

B-4. See map and plat(s) for location of proposed tank battery if well is productive. See figure attached, for layout and dimensions of tank battery. Materials are standard oil field (API and ASTM rated). Proper fencing with a turn-style gate will be installed to protect wildlife from entering production facilities or tank battery. Wire will be layed across

pits to prevent any wildlife entry. No fill or load lines will extend beyond fences so that wildlife cannot tamper with same. Also, as an added protection, such lines will be equipped with snap on plugs, so they cannot be rubbed loose. Only native materials should be required for ground-bed preparation.

4-C. Any disturbed areas no longer needed will be returned to their original contours and reseeded.

A-5 Location and Type of Water Supply - Drilling water will be supplied from the San Juan River west of the location (see map). State water permits in this regard have been previously secured by water hauler (Northwest Carriers, Inc., Farmington, New Mexico). No new roads or permanent lines will be required.

A-6 Source of Construction Materials - It is not anticipated that materials will be required to build this location. Rather, only ground leveling and reserve pit digging are contemplated.

A-7 Methods for Handling Waste Disposal - Adequate steel pits will be used to handle the recycling of drilling mud. A reserve pit will be dug to handle mud that is no longer serviceable and also to handle cuttings, salts, chemicals, etc. A pit will be dug and fenced to burn the garbage in. Human waste (sewage) will be handled by a portable privy.

Mud pits will be allowed to dry after drilling is completed and then adequately filled, tamped and leveled. All garbage and/or sewage pits will be filled as soon as the rig leaves the location. The location will be leveled and graded prior to moving in completion equipment and after completion equipment is removed.

Any fluid recovered during testing will be contained in temporary frac tanks. Any oil will eventually be sold. Water will be physically removed from the premises.

A-8 Ancillary Facilities - None anticipated at this time.

A-9 Well Site Layout - See plat of rig (Coleman Drilling Co. Rig #2) attached. There will be approximately 2 feet of cut and fill. At this present time, there appears to be no reason to contemplate lining of earthen pits.

A-10 Plans for Restoration of the Surface - The surface of the land will be restored by stockpiling any growing grasses or weeds or sods, then re-sodding those areas as required, when drilling equipment has been removed. Where sodding may prove impractical, re-seeding will be employed or required.

Approximately 2 feet of cut and fill is expected. If the well is a dry hole, the location will be reshaped to its original topography. No rerouting of existing roads is expected.

It is anticipated that pits will be fenced prior to rig release and remain so unitl clean-up and restoration. In this regard, should any oil become evident on pits, same will be removed.

Any damage done to access roads will be repaired.

Final clean-up scheduling (other than above) will be dependent upon weather and moisture content of soil. In no case will such clean-up exceed six months.

A-11 Other Information - The topography of the subject area is basically gentle rolling hills and the soil is sandy on a shallow bedrock. Vegetation is sparse and primarily weed-grasses and sage brush. No pronounced geological (surface or subsurface) features exist. No significant

water exists in proximity to this location. There is a archeological site (which will be on the back side of the reserve pit) approximately 30 feet north from where the back side of the reserve pit will be. Mr. Ken Gordon will be present while the location is being built to make sure that no vehicles or people go near the site. As stated earlier, there will be about 2 feet of cut and fill. Surface ownership is recorded as belonging to the following:

Navajo Indian Tribe
Window Rock, Arizona

Mr. Charles Morrison, of the Navajo Land Administration in Window Rock, Arizona, has been contacted and is in agreement with this program.

A-12 Operator's Representative - For the purpose of this venture the designated operator's representative is as follows:

Sanchez-O'Brien Petroleum Group
LeClair-Westwood, Inc., Agent
W. H. Leach, Jr., President
388 Denver Club Building
Denver, Colorado 80202
303-825-4258

A-13 Certification - I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which previously exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Sanchez-O'Brien Petroleum Group and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

Nov 21, 1977
Date

W. H. Leach, Agent
Name and Title

IV. Environmental Analysis Requirements

Previously requested.

V. Approval of Subsequent Operations

No request at this time.

VI. Agreement for Rehabilitiation of Privately-Owned Surface

Not applicable to this request.

VII. Well Abandonment

Not required at this time.

VIII. Water Well Conversion

Not applicable to this request.

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
NOO-C-14-5298

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL [X] GAS WELL [ ] OTHER

2. NAME OF OPERATOR
Sanchez-O'Brien Petroleum Group & LeClair-Westwood, Inc., Agent

8. FARM OR LEASE NAME
Navajo

3. ADDRESS OF OPERATOR
388 Denver Club Building, Denver, Colorado 80202

9. WELL NO.
#3

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface
NE NW Section 11, T40S, R25E

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
Section 11, T40S, R25E

14. PERMIT NO.
Approved 3-1-78.

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5284' GR

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	[ ]	PULL OR ALTER CASING	[ ]	WATER SHUT-OFF	[ ]	REPAIRING WELL	[ ]
FRACTURE TREAT	[ ]	MULTIPLE COMPLETE	[ ]	FRACTURE TREATMENT	[ ]	ALTERING CASING	[ ]
SHOOT OR ACIDIZE	[ ]	ABANDON*	[ ]	SHOOTING OR ACIDIZING	[ ]	ABANDONMENT*	[ ]
REPAIR WELL	[ ]	CHANGE PLANS	[ ]	(Other) Setting surf. csg.			[X]
(Other)				(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)			

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

On 4/20/78 ran 13 jts. (524') of 13-3/8", 48#/ft., J-55, new csg. w/Halliburton guide shoe & insert float valve w/self F/U unit. Ran 2 type S-3 centralizers 1 on shoe jt. & 1 - 2 jts. higher. Prior to cmtg. pre-flush w/10 bbls. of mud. Cmtd. w/200 sx. type HCL followed w/2% CaCl & 1/4#/flo-cele per sx. Bumped plug w/600 psi @ 5:45 AM 4/21/78. Job completed w/good cmt. returns.

18. I hereby certify that the foregoing is true and correct

SIGNED [signature] TITLE LeClair-Westwood, Inc., Agent Production Engineer DATE April 27, 1978

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____

CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side

COLEMAN DRILLING CO.
P. O. BOX 1915
FARMINGTON, N. M. 87401

PHONE 505 / 325-6892

DRILLING RIG INVENTORY

RIG # 2

RATED DEPTH CAPACITY 8,000 FEET WITH 4 1/2" DRILL PIPE

DERRICK: 127' LEE C. MOORE W/440,000 HOOK LOAD CAPACITY

SUBSTRUCTURE: LEE C. MOORE - 13' K.B.

DRAWWORKS: H-40 D IDECO

ENGINES: 2 EACH V-8 DETROIT DIESEL

MUD PUMPS: IDECO MM600 W/CATERPILLER D-379TA
555 MAX. HP AT 1100 RPM
500 INT. HP AT 1100 RPM
420 CONT. HP AT 1100 RPM

AUXILIARY MUD PUMP
GARDNER-DENVER F X Z
W/343TAC CATERPILLER

DESILTER: PIONEER 8 CONE CAPACITY 400 GPM

MUD TANK: 1 EACH 500 BBL. (42 GAL PER BBL.) WORKING CAPACITY

WATER STORAGE: 1 EACH 480 BBL. (42 GAL PER BBL.)

GENERATORS: 1 EACH 90 KW AC AND 1 EACH 30 KW AC

ROTARY TABLE: 23" IDECO

TRAVELING BLOCK: NATIONAL 430 - 150 TONS W/COMB. HOOK

SWIVEL: OILWELL PC 225

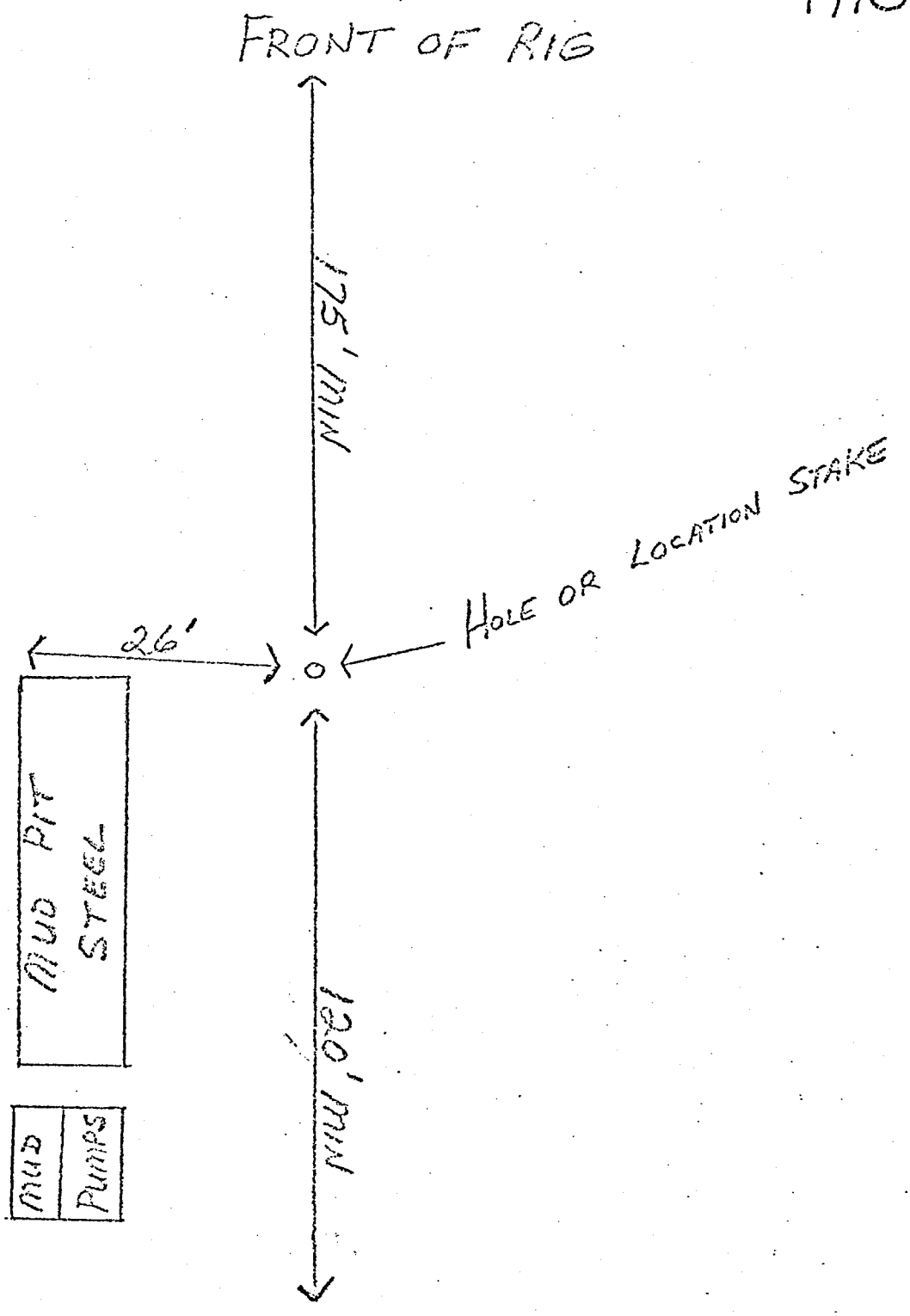
BLOW OUT PREVENTER: 10" SHAFFER LWS 3000 WP HYDRAULIC

SPECIAL: CROWN-O-MATIC
SATELITE AUTOMATIC DRILLER
TONG TORQUE GAUGE
RATE OF PENETRATION RECORDER
SHALE SHAKER
TRAILER HOUSE
TWO-WAY RADIO

JUNE 1977

COLEMAN DRILLING CO.
P. O. BOX 1915
FARMINGTON, N. M. 87401
PHONE 505 / 325-6892

RIG #2



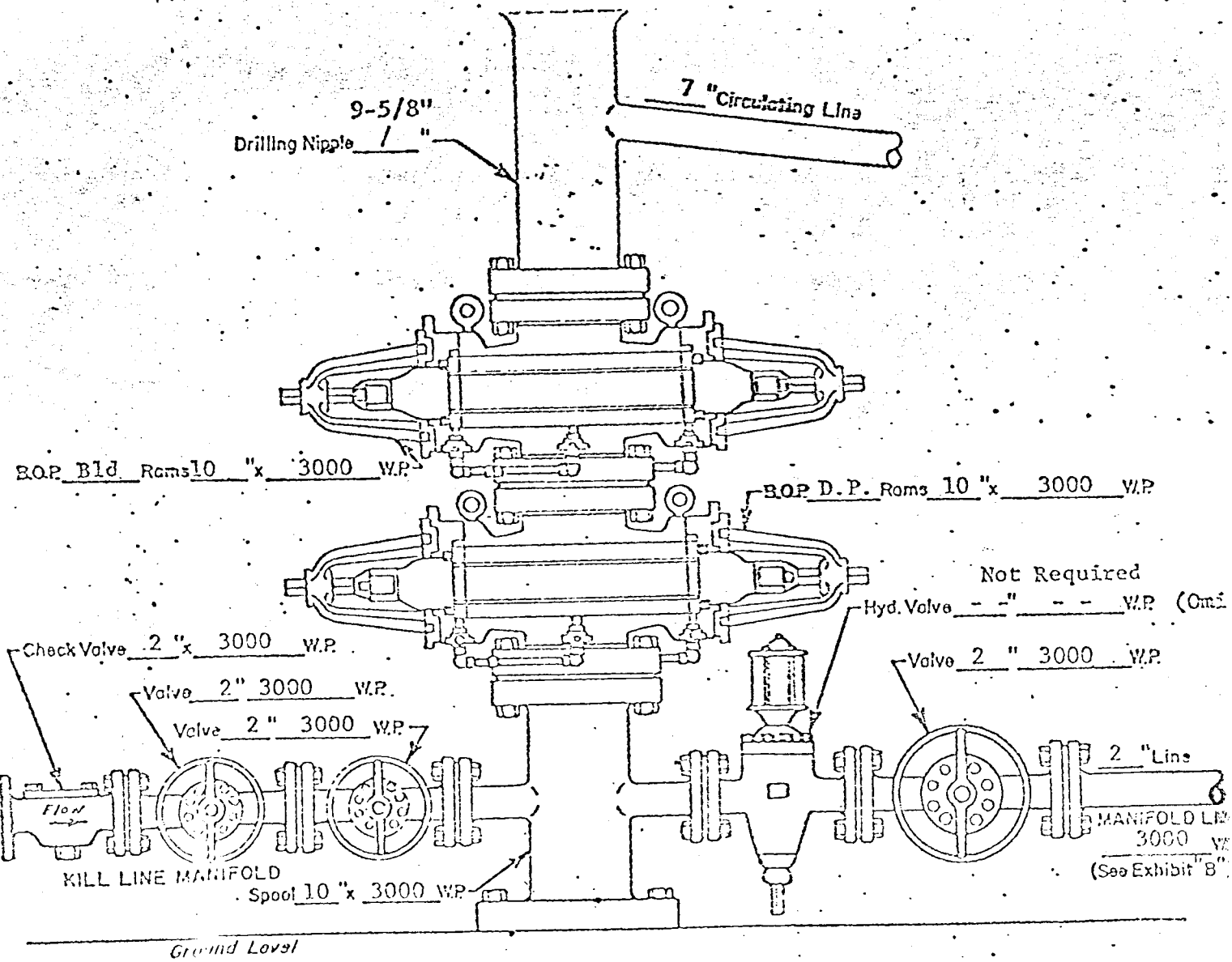
RESERVE PIT 150' X 150' X 5' DEEP

DOMAN DRILLING CO.

WELL NAME: NAVAJO # 3 AND NAVAJO # 4

LOCATION : NE NW SECTION 11, T40S, R25E

SE NE SECTION 8, T40S, R25E



WELL HEAD B.O.P

3000 #W.P. ☒ Hydraulic

THE NAVAJO NATION
WINDOW ROCK, NAVAJO NATION (ARIZONA) 86515

PETER MACDONALD
CHAIRMAN, NAVAJO TRIBAL COUNCIL

WILSON C. SKEET
VICE CHAIRMAN, NAVAJO TRIBAL COUNCIL

M-E-M-O-R-A-N-D-U-M

TO : Ken Gordon,
LeClair - Westwood Inc., 388 Denver Club Building
Denver, Colorado 80202

FROM : Richard A. Goddard, Coordinator
Cultural Resource Management Program
c/o National Park Service
PO Box 539, Farmington, New Mexico 87401

SUBJECT : Archaeological Report

Attached is a copy of the report of our recent archaeological field work. This report was mailed from our office to George West, Supervisory Archaeologist, Southwest Cultural Resources Center on November 14, 1977.

This report does not constitute an archaeological clearance. Such clearance must be obtained from the Southwest Cultural Resources Center.

Please contact this office if you have any questions. (505) 325-5036

Richard A. Goddard

Richard A. Goddard,
Coordinator

ARCHAEOLOGICAL CLEARANCE SURVEY REPORT

for

three drill holes in
San Juan County, Utah

11 November 1977

Field Survey conducted by
Malcolm K. Sender, Supervisory Archaeologist

Submitted by
Richard A. Goddard, Archaeological Coordinator
Cultural Resource Management Program
C/O National Park Service
P.O. Box 539
Farmington, New Mexico 87401

To
George G. West, Archaeologist
Southwest Cultural Resources Center
Southwest Region
P.O. Box 728
Santa Fè, New Mexico 87501

for
Ken Gordon
LeClair-Westwood Inc.
388 Denver Club Building
Denver, Colorado 80202

In response to a telephone request from Ken Gordon, Le Clair-Westwood, Inc., an archaeological survey for three drill hole sites was conducted on November 9, 1977. The locations of these drill holes are: a) Navajo #2 Southeast quarter of Southwest quarter, Section 4 Township 40 south, Range 25 east, b) Navajo #3 Southeast quarter of Northeast quarter of Northwest quarter, Section 11 Township 40 south, Range 25 east, and c) Navajo #4 Southeast quarter of Northeast quarter, Section 8 , Township 40 south, Range 25 east. All are in San Juan County, Utah. The survey was conducted under Federal Antiquities Act Permit No. 77-AZ-070, expiration date of 21 March 1979 and Navajo Tribal consent to issuance of Antiquities Act Permit No. 33, expiration date of 09 March 1979.

The proposed construction at each site is to include a drill hole, an access road, a tank battery and an overflow pit. The entire drill pad requires an area of approximately 300 feet in diameter.

S U R V E Y M E T H O D

The proposed use area for each drill hole was surveyed by a three man archaeological crew headed by Malcolm K. Sender, Archaeologist from the Cultural Resource Management Program of the Navajo Tribe. The method of survey was to make several sweeps back and forth over the proposed area with men spaced about twenty to thirty feet apart. The center stake at each drill hole was used as a pivot point while the dimensions of use area was approximated. The survey continued somewhat beyond the proposed use area to be certain that no adverse impact to cultural resources

would occur.

D R I L L H O L E - N A V A J O # 2

Navajo #2, located in the Southeast quarter of Southwest quarter, section 4 , Township 40 south, Range 25 east, lies in a gently rolling grassland terrain on top of a mesa. The land slopes from one degree to four degrees (downslope to the west). Drainage is generally to the Northwest into Navajo Canyon, about 1.2 kilometers away. There are no visible rock outcrops in or visible from the investigated are (the soil is also devoid of rock). The soil has a reddish clay base and supports a vegetation of sagebrush, snakeweed, tumbleweed, and wild grasses. The soil is relatively stable and there is little erosion.

One archaeological site (C-42-2) is located in the vicinity of this drill hole in the Southwest quarter of Southeast quarter of section 4. This site is a sherd and lithic scatter with a few (about ten) semi-shaped blocks interspersed. No structural or other features could be ascertained except for a nearly check dam, probably associated with the site, about 35 meters to the southwest. The site covers an area of about ten meters in diameter. Two shaped (pecked and ground) sandstone slabs are included among the rubble. Artifact density is low but includes Black on white sherds (late PIII to early PIII), corrugated sherds, and chert and quartzite flakes.

It is felt by the supervisory archaeologist that this site represents, at most, the remains of an early PIII field house. Depth on the site is possible and it could yield some significant data. The easternmost edge of this site lies 200 feet from the

proposed center of the drill pad. Since the site also lies on a slope of four degrees, it appears to be out of the way of drilling activity. The access road for this site approches the pad from the south and will not be at all close to the site. On this basis, clearance for Navajo #2 is recommended as long as the proposed drill hole location is not moved.

D R I L L H O L E - N A V A J O # 3

Navajo #3, located in the Southeast quarter of Northeast quarter of Northwest quarter of Section 11, is situated in a flat grassy area on top of a rocky outcrop. The slope of the terrain ranges from zero degree to one degree and drainage is mainly to the west and ultimately into Navajo Canyon. The clay base soil supports a vegetative community of sagebrush, snakeweed, tumbleweed and wild grasses.

Only one site (C=42-3) was located in the area, although there are lithics sparsely scattered over the entire flat top of the rock outcrop. This site is a sherd and lithic scatter (nintynine per cent lithic and one per cent ceramics) covering an area of about twenty meters in diameter. No features were located, however depth is possible. The three sherds which were found belong to the same pot and date to early Pueblo III. The artifact density for the site area is a maximum of fourteen per square meter. A source for the majority of the lithic material on the site (a greenish coarse grained chert) can be seen eroding out of a rock outcrop about one kilometer to the north.

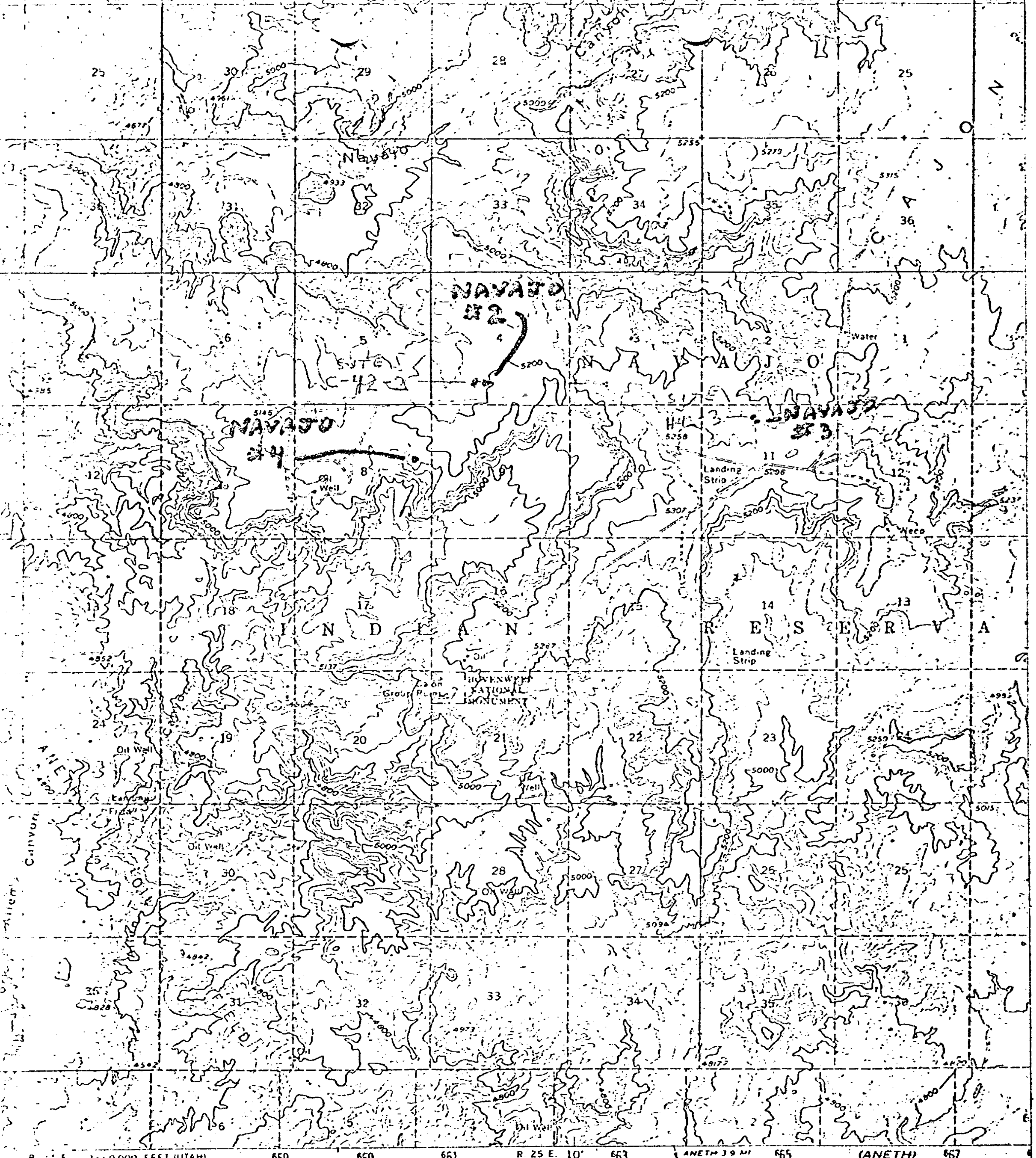
As originally staked, the drill site would have over - lapped with site C-42-3. In order to avoid the expenses of test excavation, Ken Gordon moved the center stake so that the drill pad will not encroach upon the site. He assured us that the pad will be laid out with the overflow pit lying no closer than five to eight meters from the site's southern edge. The fence which usually surrounds the pit will prevent any vehicular or human access to the site. The access road to the site is a pre-existing dirt road which does not affect any cultural resources.

If the drill site is laid out as stated by Mr. Gordon, site C-42-3 will not be endangered. The site itself could only yield a minimum of significance at best and should be tested only if disturbance is emminant. Therefore, it is felt that if Mr. Gordon follows the precautions stated above, clearance is recommended.

D R I L L H O L E - N A V A J O # 4

Navajo #4, located in the Southeast quarter of Northeast quarter of Section 8, is situated on a southerly facing bench overlooking Allen Canyon. The slope of the immediate area is minimal but drops to about a ten degrees to fourteen degrees slope only 150 feet from the center point of the drill pad. The clay based sandy soil supports a vegetative community of sagebrush snakeweed, narrow-leaf yucca, and wild grasses. Drainage is into Allen Canyon.

There were no cultural resources being impacted by either the proposed drill pad or the access road for it. Therefore, clearance for this drill site is recommended.



... published by the Geological Survey

... Field check 1958

... North American datum ...

SCALE 1:62500

CONTOUR INTERVAL ... FEET
DATUM IS MEAN SEA LEVEL

Form 9-331
(May 1963)

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN TRIPLICATE* (Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1424.

5. LEASE DESIGNATION AND SERIAL NO.
NOO-C-14-20-5298

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo

9. WELL NO.
3

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NE NW
Section 11, T40S, R25E

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

SUNDRY NOTICES AND REPORTS ON WELLS

(Do not use this form for proposals to drill or to deepen or plug back to a different reservoir. Use "APPLICATION FOR PERMIT—" for such proposals.)

1. OIL WELL ☐ GAS WELL ☐ OTHER Dry

2. NAME OF OPERATOR
Sanchez-O'Brien Petroleum Group & LeClair-Westwood, Inc., Agent

3. ADDRESS OF OPERATOR
388 Denver Club Building, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.* See also space 17 below.)
At surface 755' FNL & 2085' FWL
NE NW Section 11, T40S, R25E

14. PERMIT NO.
Approved March 13, 1978

15. ELEVATIONS (Show whether DF, RT, GR, etc.)
5296' KB 5284' GR

16. Check Appropriate Box To Indicate Nature of Notice, Report, or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
TEST WATER SHUT-OFF	☐	PULL OR ALTER CASING	☐	WATER SHUT-OFF	☐	REPAIRING WELL	☐
FRACTURE TREAT	☐	MULTIPLE COMPLETE	☐	FRACTURE TREATMENT	☐	ALTERING CASING	☐
SHOOT OR ACIDIZE	☐	ABANDON*	☐	SHOOTING OR ACIDIZING	☐	ABANDONMENT*	XX
REPAIR WELL	☐	CHANGE PLANS	☐				
(Other)				(Other)			

(NOTE: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

17. DESCRIBE PROPOSED OR COMPLETED OPERATIONS (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.) *

Well was plugged on May 14, 1978 as per instructions by Mr. Phil McGrath of the USGS in Farmington, New Mexico. Well plugged as follows:

5700'-6185'	190 sx.
4800'-5000'	101 sx.
2900'-3150'	125 sx.
1500'-1700'	125 sx.
900'-1150'	127 sx.
450'-600'	59 sx.
Surf.-50'	37 sx. w/DH marker

Well plugged @ 2:30 PM May 14, 1978. Rig released @ 3:00 PM May 14, 1978.

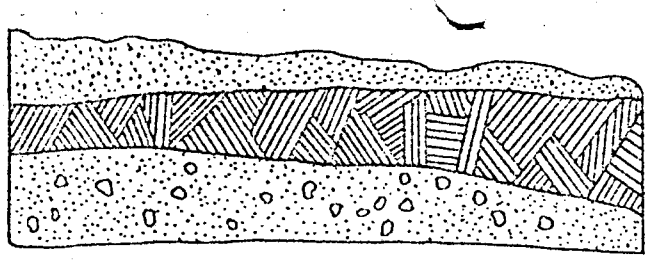
18. I hereby certify that the foregoing is true and correct

SIGNED K. R. Shaw TITLE LeClair-Westwood, Inc., Agent Production Engineer DATE May 17, 1978

(This space for Federal or State office use)

APPROVED BY _____ TITLE _____ DATE _____
CONDITIONS OF APPROVAL, IF ANY:

*See Instructions on Reverse Side



william g. hare
consulting geologist
Suite 1585
1600 Broadway
Denver, Colorado 80202
Office 303-861-9275
Home 303-985-4714

WELL PROGNOSIS

OPERATOR: Sanchez-O'Brien Petroleum Group

WELL: #3 Navajo

LOCATION: C NW NW 11-T40S-R25E
San Juan County, Utah

ELEVATION: 5250 GL
5260 KB

SURFACE PIPE: Approximately 250' of 13 3/8" surface casing

FORMATION TOPS: The following tops are calculated from an estimated elevation:

	Depth	Datum
Bluff SS	760	
Entrada	1010	
Carmel	1125	
Navajo	1155	
Kayenta	1500	
Wingate	1585	
Chinle	1885	
Shinarump	2820	
Moenkopi	2860	
DeChelly	3035	
Organ Rock	3100	

	Depth	Datum
Hermosa	4920	
Ismay	5820	
Desert Creek	6010	-750
Total Depth	6135	

DRILLING PROGRAM:

1. Catch 30' samples from 3000' to 5600'; 10' samples from 5600' to TD. Tie samples in bundles of ten, and store in dry place.
2. Mud up at 2600' with 9.3# to 9.4# mud with viscosity at 36°. Maintain water loss at 10 to 12 cc. At top of Ismay or approximately 5800', reduce water loss to 8 cc. At total depth and prior to logging, bring viscosity up to 45°.
3. Drill stem testing will be done at the discretion of the well-site geologist.
4. Strap drill pipe before all testing and logging.
5. Call well-site geologist, Clint White, when well spuds and at 5600'.

LOGGING PROGRAM:

1. Run Dual Induction-Laterolog from surface to TD.
2. Run Compensated Neutron-Formation Density Log from surface to TD.

Telephone Numbers:

Clint White:	303-247-1600
Bill Hare:	Office: 303-861-9275
	Home: 303-985-4714
Robert Gutierrez:	Office: 512-722-8092
	Home: 512-724-8547
Dyco Petroleum Corp. - Carroll Rouse:	303-893-1062
Apexco, Inc.:	303-861-1305

U- TED STATES
DEPARTM NT OF THE INTERIOR
GEOLOGICAL SURVEY

SUBMIT IN DUP TE* (other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R355.5.

WELL COMPLETION OR RECOMPLETION REPORT AND LOG*

5. LEASE DESIGNATION AND SERIAL NO.: NOO-C-14-20-5293

6. IF INDIAN, ALLOTTEE OR TRIBE NAME: Navajo

1a. TYPE OF WELL: OIL WELL ☐ GAS WELL ☐ DRY ☒ Other

b. TYPE OF COMPLETION: NEW WELL ☐ WORK OVER ☐ DEEP-EN ☐ PLUG BACK ☐ DIFF. RESVR. ☐ Other

7. UNIT AGREEMENT NAME:

8. FARM OR LEASE NAME: Navajo

2. NAME OF OPERATOR: Sanchez-O'Brien Petroleum Group & LeClair-Westwood, Inc.

9. WELL NO.: 3

3. ADDRESS OF OPERATOR: 388 Denver Club Building, Denver, Colorado 80202

10. FIELD AND POOL, OR WILDCAT: Wildcat

4. LOCATION OF WELL (*Report location clearly and in accordance with any State requirements*)*
At surface: 755' FNL & 2085' FWL
At top prod. interval reported below: NE NW Section 11, T40S, R25E
At total depth:

11. SEC., T., R., M., OR BLOCK AND SURVEY OR AREA: NE NW Section 11, T40S, R25E

14. PERMIT NO.: Approved 3-1-78 | DATE ISSUED: 3-1-78

12. COUNTY OR PARISH: San Juan | 13. STATE: Utah

15. DATE SPUDDED	16. DATE T.D. REACHED	17. DATE COMPL. (*Ready to prod.*)	18. ELEVATIONS (DF, RKB, RT, GR, ETC.)*	19. ELEV. CASINGHEAD
3/31/78	5/14/78	5/14/78	5296' KB	5284' GR

20. TOTAL DEPTH, MD & TVD	21. PLUG, BACK T.D., MD & TVD	22. IF MULTIPLE COMPL., HOW MANY*	23. INTERVALS DRILLED BY	ROTARY TOOLS	CABLE TOOLS
6185'			→	X	

24. PRODUCING INTERVAL(S), OF THIS COMPLETION—TOP, BOTTOM, NAME (MD AND TVD)*: None - Dry

25. WAS DIRECTIONAL SURVEY MADE: No

26. TYPE ELECTRIC AND OTHER LOGS RUN: IES & Density

27. WAS WELL CORED: No

28. CASING RECORD (*Report all strings set in well*)

CASING SIZE	WEIGHT, LB./FT.	DEPTH SET (MD)	HOLE SIZE	CEMENTING RECORD	AMOUNT PULLED
13-3/8"	48#	507'	17-1/4"	200 sx. HCL w/2% CaCl & 1/4#/flo-cele/sx.	

29. LINER RECORD

SIZE	TOP (MD)	BOTTOM (MD)	SACKS CEMENT*	SCREEN (MD)
		None - Dry		

30. TUBING RECORD

SIZE	DEPTH SET (MD)	PACKER SET (MD)
	None - Dry	

31. PERFORATION RECORD (*Interval, size and number*): None - Dry

32. ACID, SHOT, FRACTURE, CEMENT SQUEEZE, ETC.

DEPTH INTERVAL (MD)	AMOUNT AND KIND OF MATERIAL USED
	None - Dry

33.* PRODUCTION

DATE FIRST PRODUCTION	PRODUCTION METHOD (*Flowing, gas lift, pumping—size and type of pump*)	WELL STATUS (*Producing or shut-in*)
	None - Dry	

DATE OF TEST	HOURS TESTED	CHOKE SIZE	PROD'N. FOR TEST PERIOD →	OIL—BBL.	GAS—MCF.	WATER—BBL.	GAS-OIL RATIO

FLOW. TUBING PRESS.	CASING PRESSURE	CALCULATED 24-HOUR RATE →	OIL—BBL.	GAS—MCF.	WATER—BBL.	OIL GRAVITY-API (CORR.)

34. DISPOSITION OF GAS (*Sold, used for fuel, vented, etc.*)

TEST WITNESSED BY

35. LIST OF ATTACHMENTS

36. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records.

SIGNED R. R. [illegible] TITLE LeClair-Westwood, Inc., Agent Production Engineer DATE May 17, 1978

(See Instructions and Spaces for Additional Data on Reverse Side)

INSTRUCTIONS

General: This form is designed for submitting a complete and correct well completion report and log on all types of lands and leases to either a Federal agency or a State agency, or both, pursuant to applicable Federal and/or State laws and regulations. Any necessary special instructions concerning the use of this form and the number of copies to be submitted, particularly with regard to local, area, or regional procedures and practices, either are shown below or will be issued by, or may be obtained from, the local Federal and/or State office. See instructions on items 22 and 24, and 33, below regarding separate reports for separate completions.

If not filed prior to the time this summary record is submitted, copies of all currently available logs (drillers, geologists, sample and core analysis, all types electric, etc.), formation and pressure tests, and directional surveys, should be attached hereto, to the extent required by applicable Federal and/or State laws and regulations. All attachments should be listed on this form, see item 35.

Item 4: If there are no applicable State requirements, locations on Federal or Indian land should be described in accordance with Federal requirements. Consult local State or Federal office for specific instructions.

Item 18: Indicate which elevation is used as reference (where not otherwise shown) for depth measurements given in other spaces on this form and in any attachments.

Items 22 and 24: If this well is completed for separate production from more than one interval zone (multiple completion), so state in item 22, and in item 24 show the producing interval, or intervals, top(s), bottom(s) and name(s) (if any) for only the interval reported in item 33. Submit a separate report (page) on this form, adequately identified, for each additional interval to be separately produced, showing the additional data pertinent to such interval.

Item 29: "*Sacks Cement*": Attached supplemental records for this well should show the details of any multiple stage cementing and the location of the cementing tool.

Item 33: Submit a separate completion report on this form for each interval to be separately produced. (See instruction for items 22 and 24 above.)

37. SUMMARY OF POROUS ZONES:
SHOW ALL IMPORTANT ZONES OF POROSITY AND CONTENTS THEREOF; CORED INTERVALS; AND ALL DRILL-STEM TESTS, INCLUDING DEPTH INTERVAL TESTED, CUSHION USED, TIME TOOL OPEN, FLOWING AND SHUT-IN PRESSURES, AND RECOVERIES

FORMATION	TOP	BOTTOM	DESCRIPTION, CONTENTS, ETC.
			DST #1 - 5917-5937' Open 30 min., SI 60 min. open 30 min., & SI 90 min. Press. as follows:

Top Chart		Bottom Chart	
IH -	2918 psi	IH -	2929 psi
IF-1-	44 psi	IF-1 -	85 psi
FF-1-	44 psi	FF-1 -	123 psi
ISIP-	67 psi	ISIP -	135 psi
IF-2-	52 psi	IF-2 -	129 psi
FF-2-	50 psi	FF-2 -	92 psi
FSIP	60 psi	FSIP -	78 psi
FH -	2918 psi	FH -	2929 psi

Rec. 65' of drlg. mud.

DST #2 5923-6008' Open 30 min., SI 60 min., open 30 min. & SI 60 min. Weak blow throughout test. Press. as follows:

IH -	2996 psi	IH -	2996 psi
IF-1 -	31 psi	IF-1 -	31 psi
FF-1 -	31 psi	FF-1 -	29 psi
ISIP -	75 psi	ISIP -	74 psi
IF-2 -	32 psi	IF-2 -	29 psi
FF-2 -	34 psi	FF-2 -	31 psi
FSIP -	64 psi	FSIP -	63 psi

FH 2993 psi; FH, 2993 psi

38. GEOLOGIC MARKERS

NAME	TOP MEAS. DEPTH	TOP TRUE VERT. DEPTH
Entrada	1013'	
Carmel-Navajo	1075'	
Wingate	1578'	
Chinle	1903'	
DeChelle	3017'	
Hermosa	4932'	
Ismay	5863'	
Desert Creek	6094'	

SANCHEZ-O'BRIEN PETROLEUM CORPORATION

SUITE 270
4541 POST OAK PLACE
HOUSTON, TEXAS 77027
AREA CODE 713
629 9800

SUITE 1585
1600 BROADWAY
DENVER, COLORADO 80202
AREA CODE 303
861-9275

P.O. BOX 1337
LAREDO, TEXAS 78040
AREA CODE 512
722-6092

COMPLETION REPORT

Sanchez-O'Brien No. 3 Navajo was spudded as of March 31, 1978 and was plugged as of May 14, 1978. It geologically ran structurally as previously interpreted. Porosity and oil and gas shows were found in the zones anticipated, but because of apparent anhydrite filling, no permeability was present. The two drill-stem tests that were run, which recovered mud with no shut-in pressures, substantiates the secondary cementation problems which were encountered.

Log tops are as follows:

Entrada	1013
Carmel-Navajo	1075
Wingate	1578
Chinle	1903
DeChelle	3017
Hermosa	4932
Ismay	5863
Desert Creek	6094

Proper cement plugs were set across all zones as per requested by the USGS in Farmington, New Mexico.

Form 9-331 C
(May 1963)

SUBMIT IN TRIPLICATE*
(Other instructions on reverse side)

Form approved.
Budget Bureau No. 42-R1425.

RECEIVED
MAR 15 1978
LeClair-Westwood Inc.

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
DRILL [XX] DEEPEN [ ] PLUG BACK [ ]

b. TYPE OF WELL
OIL WELL [XX] GAS WELL [ ] OTHER SINGLE ZONE [x] MULTIPLE ZONE [ ]

2. NAME OF OPERATOR
Sanchez-O'Brien Petroleum Group & LeClair-Westwood, Inc., Agent

3. ADDRESS OF OPERATOR
388 Denver Club Building, Denver, Colorado 80202

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.*)
At surface
NE NW Section 11, T40S, R25E
At proposed prod. zone 755/N & 2085/W

5. LEASE DESIGNATION AND SERIAL NO.
N00-C-14-20-5298

6. IF INDIAN, ALLOTTEE OR TRIBE NAME
Navajo

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
Navajo

9. WELL NO.
#3

10. FIELD AND POOL, OR WILDCAT
Wildcat

11. SEC., T., R., M., OR BLK. AND SURVEY OR AREA
NE NW
Section 11, T40S, R25E

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
14 miles northeast of Aneth Utah

12. COUNTY OR PARISH
San Juan

13. STATE
Utah

15. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drlg. unit line, if any)
775

16. NO. OF ACRES IN LEASE
1280

17. NO. OF ACRES ASSIGNED TO THIS WELL
80

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT.

19. PROPOSED DEPTH
6300'

20. ROTARY OR CABLE TOOLS
Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.)
GR 5284'

22. APPROX. DATE WORK WILL START*
March 1, 1978

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
17-1/2"	13-3/8" H-40	48#/ft	500	250 sx. "B" w/2% CaCl
8-5/8"	5-1/2" New J-55	15.5 & 17.0 #/ft.	6300'	250 sx. 50-50 Pozmix w/2% gel, 10% salt, .75% CFR-2 & .8% HALAD-9

We propose to drill a well to 6300' to test the Desert Creek Formation and any zone of significance. If productive, we will case as shown and complete. If dry, we will P&A as per USGS and State of Utah requirements.

RECEIVED
JUN 1 1978
DIVISION OF OIL GAS, & MINING

Already Drilled
Accept for Record Only

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24.
SIGNED K R Gordon TITLE LeClair-Westwood, Inc., Agent Production Engineer DATE 11-22-77

(This space for Federal or State office use)

PERMIT NO. APPROVAL DATE

APPROVED BY TITLE DATE
CONDITIONS OF APPROVAL, IF ANY:

APPROVED
MAR 13 1978
P. T. McGrath
P. T. McGRATH
DISTRICT ENGINEER

OPERATOR

RECEIVED
DEC 2 1977
U.S. Geological Survey
Farmington, N.M.

*See Instructions On Reverse Side

"APPROVAL TO FLARE GRANTED WHILE DRILLING AND TESTING."

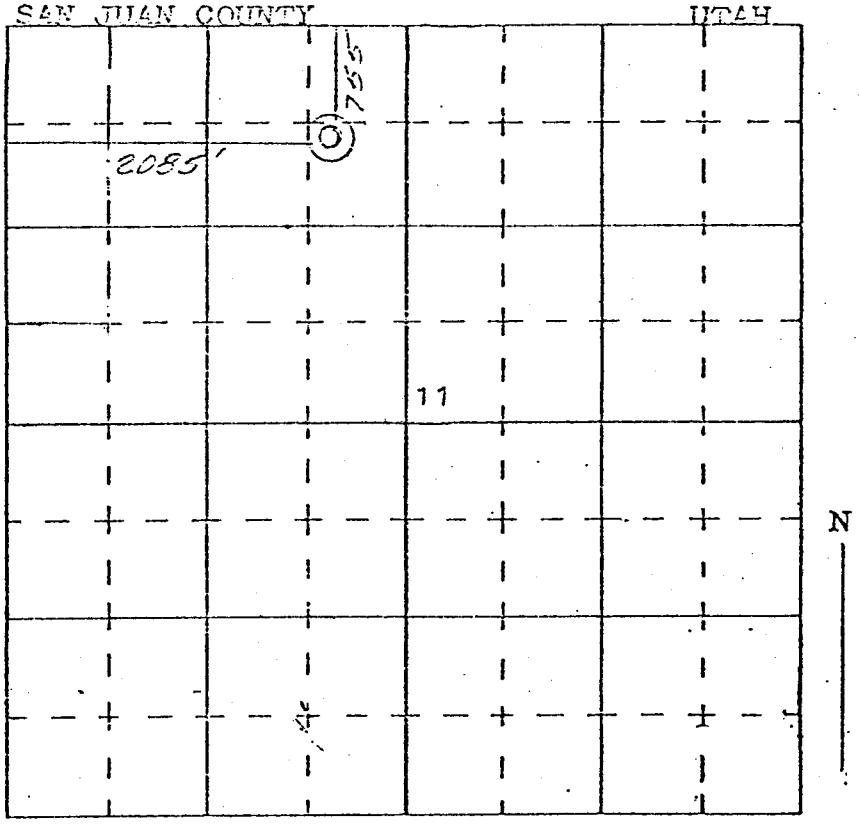
COMPANY SANCHEZ-O'BRIEN

LEASE NAVAJO WELL NO. 3

SEC. 11, T 40 SOUTH, R 25 EAST S.L.M.

LOCATION 755 FEET FROM THE NORTH LINE
2085 FEET FROM THE WEST LINE

ELEVATION 5284



SCALE—4 INCHES EQUALS 1 MILE

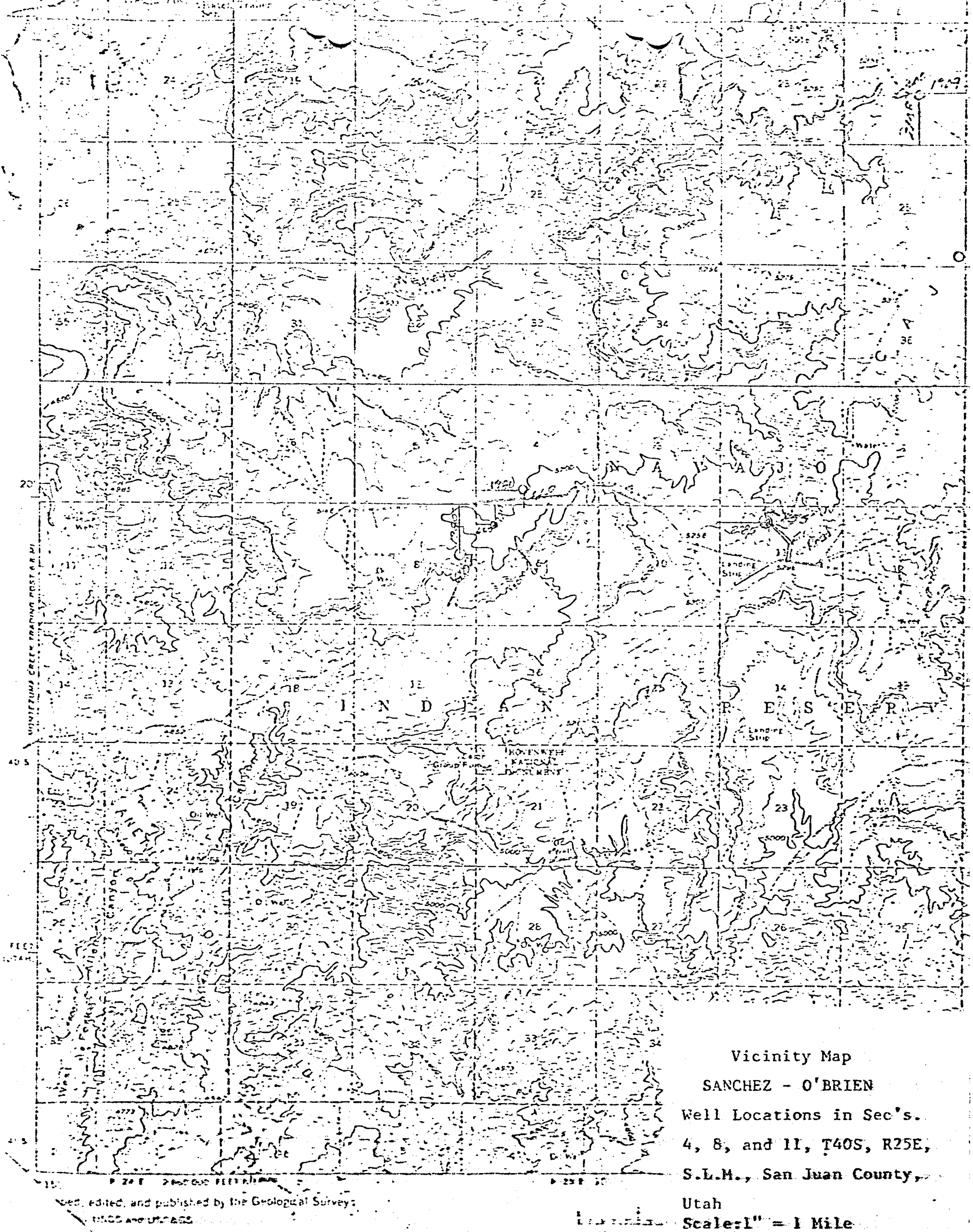
THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTE OF ACTUAL SURVEYS MADE BY ME UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SEAL:

Registered Land Surveyor.
James P. Leese
Utah Reg. #1472

SURVEYED 29 October, 1977

SAN JUAN ENGINEERING COMPANY, FARMINGTON, N. M.

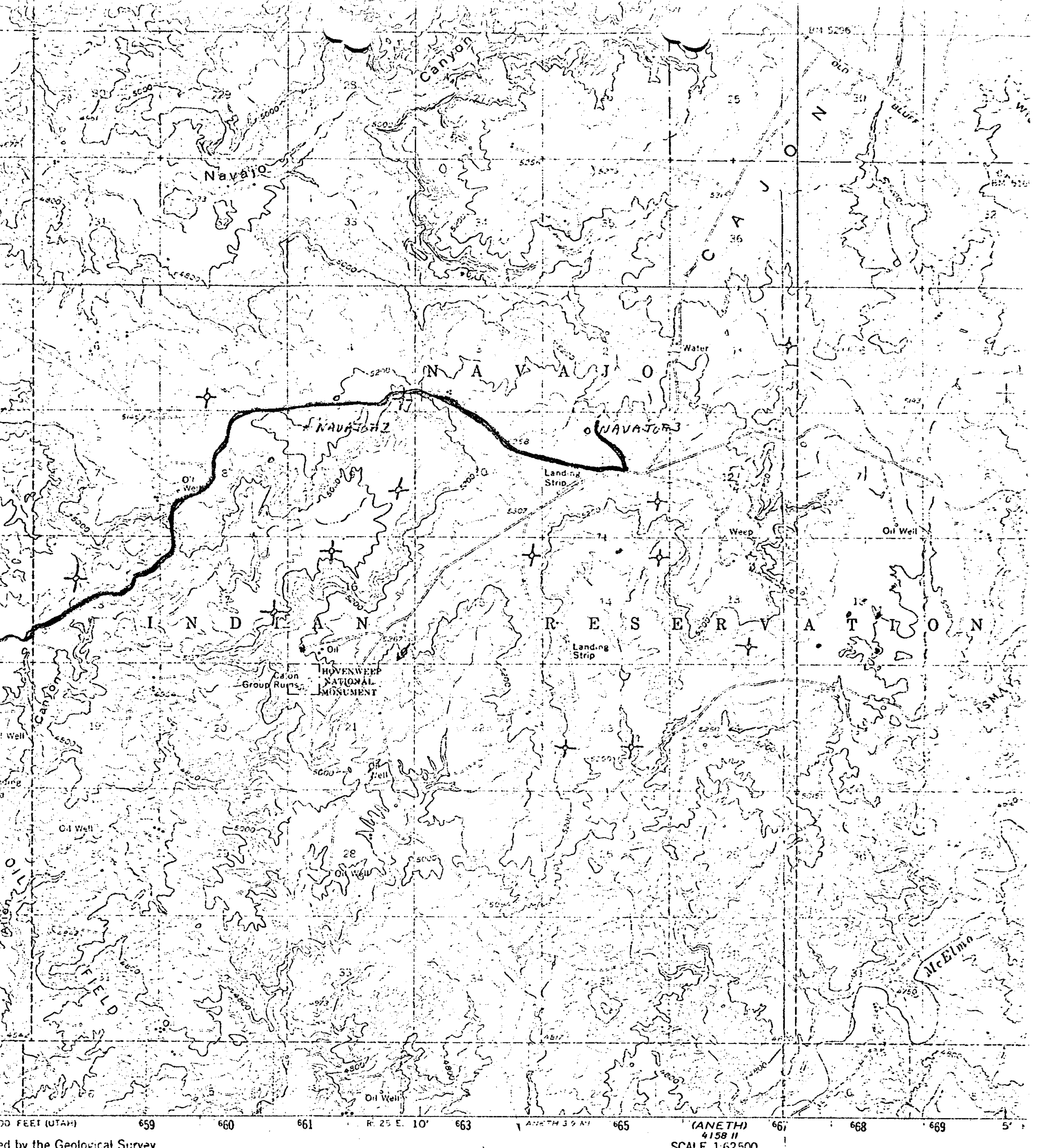


Vicinity Map

SANCHEZ - O'BRIEN

Well Locations in Sec's. 4, 8, and 11, T40S, R25E, S.L.M., San Juan County, Utah

Scale: 1" = 1 Mile



ed by the Geological Survey

phs by photogrammetric methods
Field check 1958

rth American datum
coordinate system, south zone
south zone
Mercator grid ticks.

ximate locations
n brown

GN MN
0°59' 17 MILS
14½° 258 MILS

UTM GRID AND 1958 MAGNETIC NORTH
DECLINATION AT CENTER OF SHEET

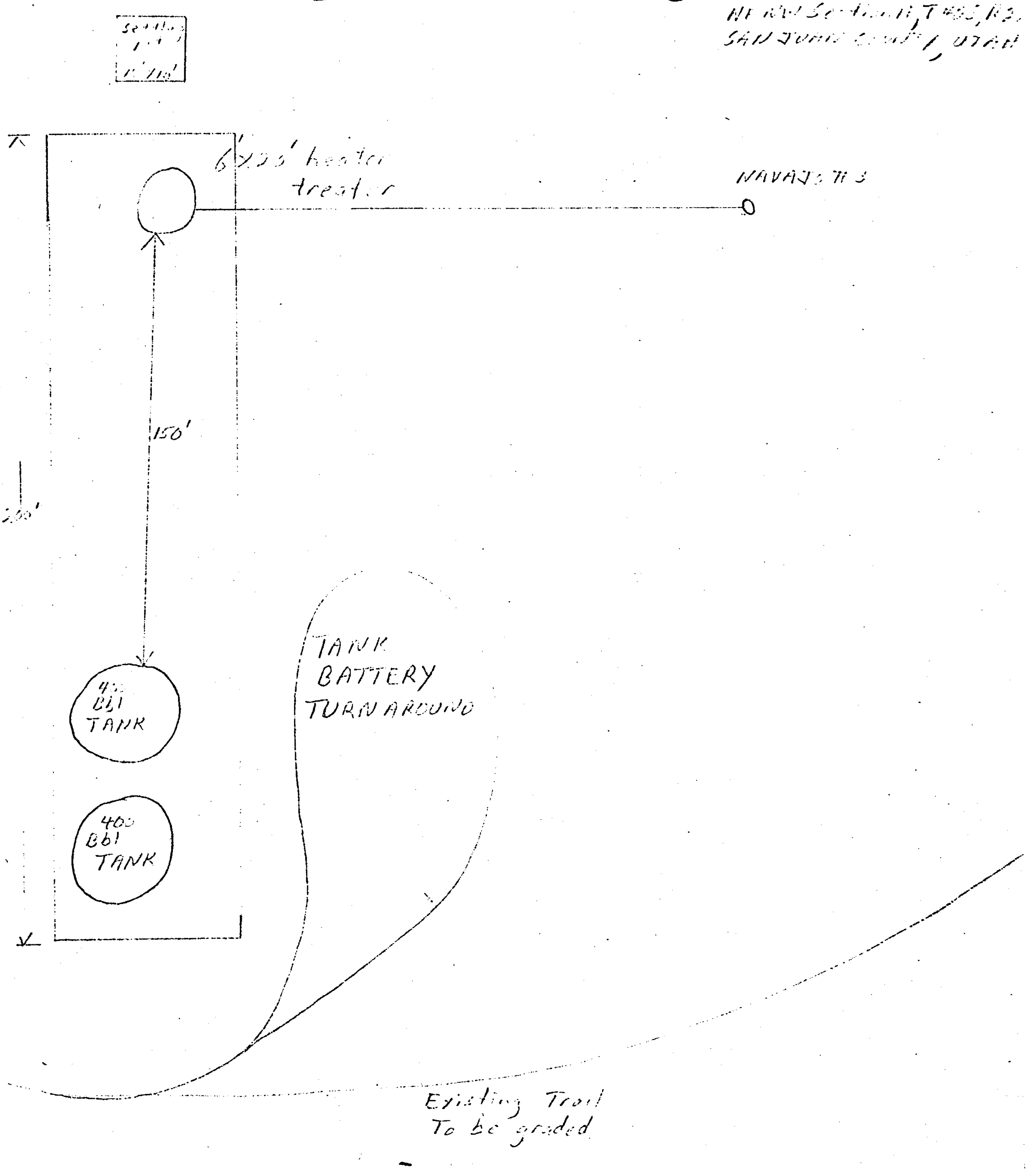
SCALE 1:62500

1 ½ 0 1 2 3
3000 0 3000 6000 9000 12000 15000 18000 21000 FEET
1 .5 0 1 2 3 4 5 KILOMETERS

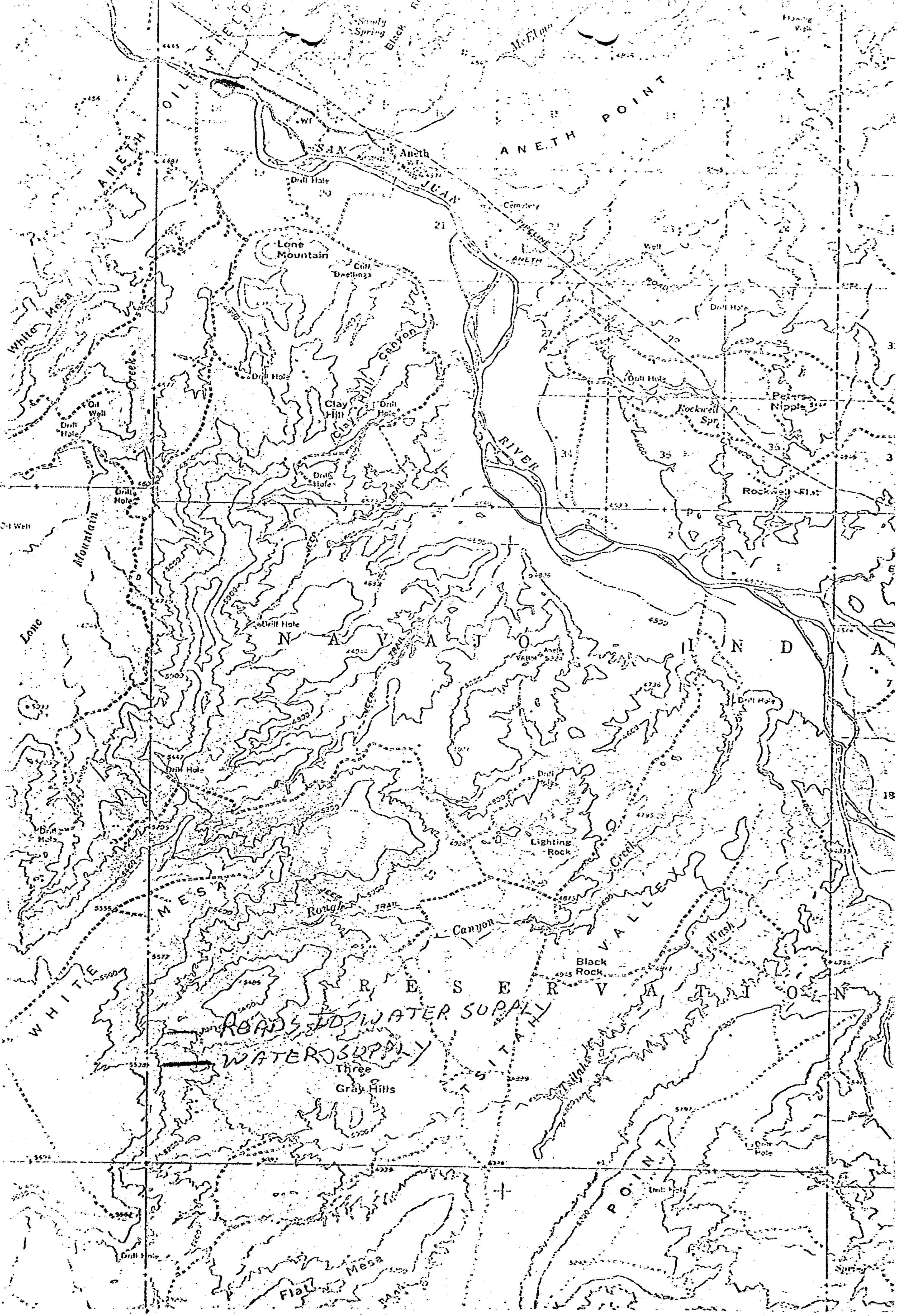
CONTOUR INTERVAL 40 FEET
DATUM IS MEAN SEA LEVEL

THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
FOR SALE BY U. S. GEOLOGICAL SURVEY, DENVER 25, COLORADO OR WASHINGTON 25, D. C.
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

NAVAJO # 3
SANCHEZ-O'BRIEN
NE NW Section 11, T43S, R2.
SAN JUAN County, UTAH



NOT TO SCALE


ANETH OIL FIELD
Sandy Spring
Black
McElmo
ANETH POINT
SAN JUAN
Aneth
Drill Hole
Cemetery
PIPELINE
Lone Mountain
Cliff Dwellings
Well
ANETH ROAD
White Mesa
Creek
Clay Hill Canyon
Clay Hill
Oil Well
RIVER
Drill Hole
Peters Nipple
Rockwell Spr
Rockwell Flat
Oil Well
Lone Mountain
JEEP TRAIL
N A V A J O I N D I A N
Lighting Rock
WHITE MESA
JEEP
Rough
TRAIL
Canyon
VALLEY
Creek
Black Rock
Wash
R E S E R V A T I O N
ROADS TO WATER SUPPLI
WATER SUPPLY
Three Gray Hills
TSITAH
POINT
Flat
Mesa
Spring

KMG JWG Jim ☑
CIRCULATE TO: Mike ☑

DIRECTOR ☐
PETROLEUM ENGINEER ☑
MINE COORDINATOR ☐
ADMINISTRATIVE ASSISTANT ☐
ALL ☐
RETURN TO Kathy Avila FOR FILING

FORM OGC-8-X
FINLE IN QUADRUPLICATE

RECEIVED
JUN 14 1978
DIVISION OF OIL, GAS, & MINING

STATE OF UTAH
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS, AND MINING
1588 West North Temple
Salt Lake City, Utah 84116

REPORT OF WATER ENCOUNTERED DURING DRILLING

WELL NAME & NUMBER Navajo #3

OPERATOR LeClair-Westwood, Inc., Agent & Sanchez-O'Brien Petroleum Group

Address 388 Denver Club Building, Denver, Colorado 80202

CONTRACTOR Signal Oilfield Service

Address 1200 Security Life Building, Denver, Colorado 80202

LOCATION NE ¼ NW ¼; Sec. 11 ; T. 40 ~~N~~ S; R. 25 E ~~W~~

COUNTY San Juan

WATER SANDS:

	DEPTH From -	to-	VOLUME: Flow Rate or Head -	QUALITY: Fresh or Salty -
1.			None	
2.				
3.				
4.				
5.				

(Continue on Reverse Side if Necessary)

FORMATION TOPS:

NOTE:

(a) Upon diminishing supply of forms, please inform this office.
(b) Report on this form as provided for in Rule C-20. General Rules and Regulations and Rules of Practice and Procedure.
(c) If a water quality analysis has been made of the above reported zone, please forward a copy along with this form.